

Remarks

In the Office Action mailed January 25, 2007, the Examiner renewed his rejections of: (i) claims 1 and 20 under Section 103(a) as unpatentable over U.S. Patent No. 5,631,984 to Graf (“Graf”) in view of U.S. Patent No. 5,570,435 to Bloomberg (“Bloomberg”); (ii) claim 2 under Section 103(a) as unpatentable over Graf, Bloomberg and U.S. Patent No. 6,980,331 to Mooney (“Mooney”); (iii) claims 5, 6, and 7 under Section 103(a) as unpatentable over Graf, Bloomberg, Mooney, and Microsoft Corporation Word 9 (“Word 9”); and (iv) claims 9, 11 and 18 under 35 U.S.C. 103(a) as unpatentable over Graf in view of Bloomberg and Reference U (“Gonzalez”). Although not specifically identified on pg. 6, the Examiner appears to also reject claims 12-14 under Section 103(a) as unpatentable over Graf and Bloomberg.

The Examiner also made the following new rejections: (i) claim 20 under Section 101 as directed to unpatentable subject matter; (ii) claims 1, 8, 13, 19, 20 under Section 112; (iii) claim 4 as unpatentable over Graf, Bloomberg, Mooney, and Word 9; (iv) claim 19 under 35 U.S.C. 103(a) as unpatentable over Graf, Bloomberg, and Word 10. The Examiner also objected to the Drawings for the first time.

Applicant has amended claims 1, 8, 13, and 20 in response to the new Section 112 rejections *only*. Applicant does not believe that these amendments affect the scope of the claims, and thus will not necessitate a new search.

Claims 1-2, 4-15, and 17-20 will be pending after entry of this Amendment.

I. Rejections under Section 101

The Examiner rejected claim 20 as directed to non-statutory subject matter, and suggests that this rejection can be overcome if Applicant amends the claim to recite “a computer readable medium, comprising.” Applicant respectfully traverses. Claim 20 already contained the element “a tangible computer readable media bearing the program.”

II. Rejections under Section 112

The Examiner rejected claims 1, 8, 13, 19, and 20 under a variety of Section 112 theories. Unfortunately, the Examiner was unable to grant Applicant's Interview Request, (filed on April 17, 2007) because the Examiner was in the process of transferring to a new position and did not want to bind his successor. Nevertheless, Applicant has made several amendments to address these concerns. More specifically:

- 1) The Examiner rejected claims 1 and 20 because it was unclear whether the second image was identical to the first image. In response, Applicant has added clauses clarifying that "each copy of the document comprises a plurality of pages" and that "at least some of the plurality of pages in each copy have handwritten notations thereon." Applicant has also clarified the two capturing elements in claim 1.
- 2) The Examiner rejected claim 13 because it was unclear which of the plurality of pages were being operated upon. In response, Applicant has clarified that the scanner "captur[es] images of a page from a plurality of drafts of a document" and the processor is "configured to determine whether each captured page contains a new handwritten notation and configured to print the captured image only if the captured image contains at least one new handwritten notation."
- 3) The Examiner rejected claim 19 because it was unclear how a single image is captured from several copies. In response, Applicant has clarified that the scanner "captur[es] digital images of multiple copies of a document, wherein each copy of the document comprises a plurality of pages and wherein at least some of the plurality of pages in each copy have handwritten notations thereon." Applicant has also clarified that "the programmable processor is programmed to detect handwritten comments on the least one of the plurality of pages and to selectively. . . ."
- 4) The Examiner rejected claims 1 and 20 as omitting essential steps, namely that the entire document must be scanned and registered as a first draft before any second copies are scanned. Applicant respectfully traverses. Although this scan-

register-scan technique is one suitable embodiment, other implementations are possible. For example, some embodiments may programmatically detect which draft is second-in-time by detecting the presence of new notations (i.e., the notations on the one draft are a subset of the notations on another draft).

5) The Examiner rejected claim 8 because the limitations “first paper document” and “second paper document” lack antecedent basis. Applicant has amended claim 8 to recite “first copy” and “second copy.”

Again, Applicant believes that these amendments are directed at correcting the Section 112 issues, and thus will not necessitate a new search.

III. Objections to Drawings

The Examiner objected to Figures 2E as containing an infinite loop and Figure 2F as containing a mislabeled block. Applicant has submitted proposed drawing modifications herewith, with the changes indicated in blue. Applicant will submit new formal drawings after receiving a Notice of Allowance.

IV. Rejections under Section 103

A. Claims 1 and 20

Applicant believes a brief summary of the present invention will help present this issue more clearly. As explained in Applicant's background section, teams of employees often cooperatively prepare and review documents. Inevitably, these group projects require that documents be copied multiple times for review and for creating a record of changes. Unfortunately, this 'circulate the draft' process spreads editorial comments across the multiple physical copies. Thus, to find all of the changes and/or to retain a record of who made what changes, one employee must sort through every copy of the document, then extract those pages with comments, then feed those pages into the copier and/or enter the changes into a computer, then re-insert the pages back into the originals. This process is time consuming and, invariably, results in some lost comments. Moreover, as documents are serially reviewed, it becomes difficult to identify and focus upon new comments.

The present invention solves these problems by providing a way to collate documents with changes, index changes as part of copy job, create side markings as part of a copy job, and/or compare reviewer comments and handwritten additions in the copier job. As such, Applicant believes that its invention is directed at a fundamentally different level of problem than the 'handwriting extraction' methods described in Graf and Bloomberg. Put more simply, the handwriting extraction methods described in Graf and Bloomberg may be useful in implementing the present invention, but do not anticipate or obviate it.

Turning now to the substance of the rejections, Applicant notes that the Examiner bears the burden of establishing a prima facie case of obviousness. *MPEP* § 2142. To satisfy this burden, three basic criteria must be met. First, there must be some suggestion or motivation to make the proposed modification or combination. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations. *Id.* Applicant respectfully submits that the Examiner has failed to satisfy at least the first and third criteria.

1. None of the references teach or suggest selectively printing a page in a document "only if" that page has handwritten notations.

a. Graf

Graf is directed at the problem of how to efficiently store and transmit documents, particularly checks. *Graf, col. 1, lines 10-14.* Graf teaches that each check should be first scanned, and then separated into static and dynamic portions. *Graf, col. 2, lines 45-52.* Graf provides an elaborate process for performing this separation. The static portions are eventually discarded and the dynamic portions saved so that the bank can regenerate the original negotiable instrument if a customer disputes a charge. *Graf, col. 2, lines 52-59.*

The present invention, in contrast, is directed at a fundamentally different problem, namely how to manage editorial comments across the multiple, physical copies of a document. With this fundamental differences in mind, Applicant respectfully submits that Graf fails to teach or suggest "printing the first image [of a page from a first

copy of the paper document] *only if* the first image contains at least one handwritten notation" and printing the second image [of a page from a second copy of the paper document] *only if* the second image contains at least one handwritten notation" in Claims 1 and 20 (*emphasis added*). Instead, Graf scans and stores every check presented to the bank, not just those with handwritten notations.

Applicant further notes that the Examiner has conceded that Graf fails to teach these elements. *Office Action mailed January 25, 2007 at pg. 7.*

b. Bloomberg

Bloomberg is primarily directed at a method for locating type styles, such as bold and italic type styles. *Bloomberg, col. 2, lines 16-24*. The results of this analysis can be used in automatic database indexing of scanned images in which bold and italic styles would be used to directly and automatically generate keyword indices, or to produce copies of a black and white document in which portions in bold or italic are reproduced in color. *Id.* Bloomberg also includes a method for separating handwritten annotations and machine printed text in an image or document. *Id. at col. 3, lines 35-43*. Bloomberg teaches that this method allows the handwritten portions to be removed, while retaining machine printed text or, conversely, for the machine printed text to be removed, while retaining the handwritten annotation. *Id. at col. 8, lines 47-53*.

As a result of this focus, Bloomberg fails to contemplate systematically going through a plurality of copies of a document, identifying pages with handwritten comments, and then selectively printing only those pages with handwritten notations. More specifically, Bloomberg also fails to teach or suggest "printing the first image [of a page from a first copy of the paper document] *only if* the first image contains at least one handwritten notation" and "printing the second image [of a page from a second copy of the paper document] *only if* the second image contains at least one handwritten notation" (*emphasis added*). Thus, while Bloomberg may perhaps be used to implement portions of the present invention, it does not teach or suggest the key claimed elements.

2. There would be no motivation to modify Graf to selectively print a page in a document “only if” that page has handwritten notations.

The Examiner stated that the motivation to combine Graf with Bloomberg was “to only print checks or documents wherein handwritten is detected, so as to not print blank checks and/or unmarked documents.” *Office Action mailed January 25, 2007 at pg. 8.* Applicant first notes that this motivation does not come from the references themselves, but rather is entirely supplied by the Examiner. Accordingly, Applicant believes the supplied motivation is improper. *MPEP § 2143.01(I)*

Moreover, Applicant again notes that Graf is fundamentally directed at the problem of storing legal instruments, such as checks, deeds, court records, and the like. *Graf, col. 1, lines 15-25.* Because these documents have legal significance, it is critical that the bank or registrar store each and every document presented to it. For example, when a bank refuses to honor a check because its customer failed to endorse the check, that decision will cause significant harm to the payee. That decision may cause significant harm to the payor, such as putting that customer into default on a debt. To prevent the bank from being liable to either party, the bank will need to reproduce the presented document to prove that it properly denied payment. That is, no bank in the world would be motivated to selectively “print only checks or documents wherein handwriting is detected, so as not to print blank checks and/or unmarked checks.” *Office Action mailed January 25, 2007 at pg. 8.* To prevent liability, the bank will need to reproduce every check upon request, whether it was blank or not.

Because modifications that render the prior art unsatisfactory for its intended purpose are not proper, *MPEP § 2143.01(V)*, Applicant respectfully submits that the Examiner’s supplied motivation would not exist.

B. Other claims

Applicant notes that claim 13 contains the following element “a processor configured to determine whether the captured page contains a new handwritten notation and configured to print the image *only if* the image contains at least one new handwritten

notation” (emphasis added) and that claim 19 contains the following element
“programmable processor. . .programmed to detect handwritten comments on the least
one page and to selectively: determine if the handwritten comment is new . . . and print
the image *only if* the page includes at least one handwritten comment” (*emphasis added*).
The remaining claims are all dependent on claim 1, 13, 19 or 20.

Applicant respectfully submits that Graf and Bloomberg fail to teach or suggest
selectively printing a page in a document “only if” that page has handwritten notations
for the reasons discussed above.

Word 9 also fails to teach or suggest these elements. Instead, the reproduced
screen-shots simply teach that Microsoft Word 2000 had a feature where you could track
changes in an electronic document. There is no teaching of tracking changes to physical
documents, much less selectively printing a page in a document “only if” that page has
handwritten notations.

Gonzales also fails to teach or suggest these elements. Instead, Gonzales (as best
understood, the supplied copy is missing a portion of each line) simply teaches that you
can detect motion by comparing frames. However, there is no teaching of tracking
changes to physical documents, much less selectively printing a page in a document
“only if” that page has handwritten notations.

Jinnai also fails to teach or suggest these elements. Instead, Jinnai is directed at a
facsimile machine that can store images of the documents. This facsimile machine can
also read instructions from special “mark sheets.” However, there is no teaching of
tracking changes to physical documents, much less selectively printing a page in a
document “only if” that page has handwritten notations.

Mooney also fails to teach or suggest these elements. Instead, Mooney is directed
at the detection and recognition of embedded identity information, such as a name and/or
facsimile telephone number, in an imaged document for transmission, conversion of the
recognized name, fax number or e-mail address into textual information, and automatic
transmission of the imaged document to the fax number or e-mail indicated by the textual
information. However, there is no teaching of tracking changes to physical documents,

much less selectively printing a page in a document “only if” that page has handwritten notations.

II. Conclusion

It is believed that the present application is in condition for allowance and a prompt and favorable allowance of all claims is respectfully requested. If the Examiner, upon considering this Response, thinks that a telephone interview would be helpful in expediting allowance of the present application, he/she is respectfully urged to call the Applicant's attorney at the number listed below.

Respectfully submitted,

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